

AMENDMENTS TO THE CLAIMS

This listing of claims is provided as an aid to the Examiner. No claims have been amended, added, or canceled by this Response.

Claim Listing:

1. (Previously Presented) A method, comprising:

defining at least one condition for a first gateway support node, so that when the condition is fulfilled, a second gateway support node is more suitable for transmitting packets over a connection, the second gateway support node being an alternative to the first gateway support node so that the packets are transmitted from a subscriber either via the first gateway support node or via the second gateway support node, the condition not relating to a receiver of a packet;

detecting, by the first gateway node that the condition is fulfilled, and

instructing, by the first gateway node, to select the second gateway support node by sending a first message indicating the second gateway support node.

2. (Previously Presented) The method according to claim 1, the method further comprising:

receiving in the first gateway support node a second message which indicates that a tunnel for transmitting packets between a subscriber and an external data network is to be established between a serving support node and the first gateway support node,

checking said condition, and

transmitting the first message to the serving support node if said condition is fulfilled, or

establishing a tunnel if said condition is not fulfilled.

3. (Previously Presented) The method according to claim 2, wherein if the tunnel is established between the serving support node and the first gateway support node, the method further comprises:

detecting a change in operating conditions in the first gateway support node,

checking said condition, and

transmitting a third message indicating said second gateway support node to the serving support node and removing the tunnel in the first gateway support node if said condition is fulfilled.

4. (Previously Presented) The method according to claim 3, wherein the system is a general packet radio service system and said first and third messages are response messages to a 'Create packet data protocol Context' request.

5. (Previously Presented) The method according to claim 2, wherein if the tunnel is established between the serving support node and the first gateway support node, the method further comprises:

detecting a change in operating conditions in the first gateway support node,

checking said at least one condition for the first gateway support node, and

performing, if said condition is fulfilled:

transmitting a fourth message indicating said second gateway support node to the serving support node,

waiting for an acknowledgement to said fourth message,

receiving the acknowledgement, and

removing the tunnel in the first gateway support node in response to a positive acknowledgement.

6. (Previously Presented) The method according to claim 5, wherein the system is a general packet radio service system and said first and fourth messages are response messages to a 'Create packet data protocol Context' request.

7. (Previously Presented) The method according to claim 1, the method further comprising:

establishing a tunnel between a serving support node and the first gateway support node,

detecting a change in operating conditions in the first gateway support node,

checking said at least one condition for the first gateway support node, and

transmitting a first message to the serving support node if said condition is fulfilled, said first message indicating that the tunnel should be removed to said second gateway support node.

8. (Previously Presented) The method according to claim 7, wherein if fulfilment of said at least one condition for the first gateway support node is detected, removing the tunnel in the first gateway support node in response to the transmission of said first message.

9. (Previously Presented) The method according to claim 7, wherein if fulfilment of the condition is detected,

waiting for an acknowledgement to the first message,

receiving the acknowledgement, and

removing the tunnel in response to a positive acknowledgement.

10. (Previously Presented) A packet-switched telecommunications system, comprising

a support node serving a subscriber of the telecommunications system,

a first and a second gateway support node, wherein

the support node is arranged to activate establishment of a tunnel, to be used for transmission of packets, originating from the subscriber, between the support node and the first gateway support node,

in response to fulfilment of a predefined condition, the predefined condition not relating to a receiver of a packet, the first gateway support node is arranged to send to the serving support node a first message indicating the second gateway support node which is more suitable for transmitting packets,

in response to receiving the first message, the serving support node is arranged to activate establishment of a tunnel to be used in transmission of packets with the second gateway support node indicated, and

packets transmitted using the tunnel between the support node and the first gateway support node are not sent from the first gateway support node to the second gateway support node.

11. (Previously Presented) The telecommunications system according to claim 10, wherein

the telecommunications system comprises a database where information on the second gateway support nodes defined for the first gateway support node is maintained, and

the first gateway support node is arranged to retrieve the most suitable second gateway support node from the database when the predefined condition is fulfilled.

12. (Previously Presented) The telecommunications system according to claim 10 wherein the first gateway support node is arranged to check at least one predefined condition in response to receiving a message requesting establishment of the tunnel from the serving support node.

13. (Previously Presented) The telecommunications system according to claim 10, wherein

the telecommunications system comprises the tunnel used for transmitting packets between the serving support node and the first gateway support node, and

the first gateway support node is arranged to detect a change in operating conditions and check at least one of said predefined conditions in response to detecting the change.

14. (Previously Presented) A gateway support node of a packet network arranged to transmit, in response to fulfilment of a predefined condition, a first message indicating another gateway support node which is more suitable for transmitting packets, the predefined condition not relating to a receiver of a packet, wherein the gateway support node is configured not to transmits received packets to the other gateway support node but to transmit the received packets towards their destination address.

15. (Previously Presented) The gateway support node according to claim 14, wherein the gateway support node is further arranged to check at least said predefined condition in response to receiving a message requesting establishment of a tunnel from a serving support node.

16. (Previously Presented) The gateway support node according to claim 14 wherein there is a tunnel used for transmitting packets between the gateway support node and a serving support node,

said predefined condition relates to operating conditions of the gateway support node, and

the gateway support node is further arranged to detect a change in operating conditions and check at least said predefined condition in response to detecting the change.

17. (Previously Presented) A support node arranged, in response to an address of a second gateway support node included in a message received from the first gateway support node, to activate establishment of a tunnel to be used for transmitting packets with said second gateway support node.

18. (Previously Presented) The serving support node according to claim 17, further arranged to remove an existing tunnel to the first gateway support node in response to activation of tunnel establishment with the second gateway support node.

19. (Previously Presented) The serving support node according to claim 17, further arranged to remove an existing tunnel to the first gateway support node in response to successful establishment of the tunnel to the second gateway support node.

20. (Previously Presented) The gateway support node according to claim 14, wherein the gateway support node is arranged to transmit the first message to a support node serving the subscriber.

21. (Previously Presented) A gateway support node of a packet network comprising a processor configured to transmit, in response to fulfillment of a predefined condition, a first message indicating another gateway support node which is more suitable for transmitting packets, the predefined condition not relating to a receiver of a packet, wherein the gateway support node is configured not to transmits received packets to the other gateway support node but to transmit the received packets towards their destination address.

22. (Previously Presented) The gateway support node according to claim 21, wherein the processor is further configured to be responsive to a message requesting establishment of a tunnel from a serving support node to the gateway support node.

23. (Previously Presented) The gateway support node according to claim 21, wherein the processor is further configured to detect a change in operating conditions of a tunnel used for transmitting packets between the gateway support node and a serving support node and to check at least said predefined condition in response to detecting the change.

24. (Previously Presented) The gateway support node according to claim 21, wherein the processor is further configured to transmit the first message to a support node serving the subscriber.

25. (Previously Presented) A support node comprising a processor configured, in response to an address of a second gateway support node included in a message received from a first gateway node, to activate establishment of a tunnel to be used for transmitting packets with said second gateway support node.

26. (Previously Presented) The serving support node according to claim 25, the processor being further configured to remove an existing tunnel to the first gateway support node in response to activation of tunnel establishment with the second gateway support node.

27. (Previously Presented) The serving support node according to claim 25, the processor being further configured to remove an existing tunnel to the first gateway support node in response to successful establishment of the tunnel to the second gateway support node.

28. (Previously Presented) A processor configured to detect, that a condition is fulfilled, the condition being defined for a first gateway support node and not relating to a receiver of a packet, so that when the condition is fulfilled, a second gateway support node is more suitable for transmitting packets than the first gateway node selected for transmitting packets, and to instruct, in response to the condition being fulfilled, to select, instead of the first gateway node, the second gateway support node by sending a first message indicating the second gateway support node.

29. (Previously Presented) A computer-readable medium having stored thereon a software routine, comprising

detecting that a condition is fulfilled, the condition being defined with respect to a first gateway support node and not relating to a receiver of a packet, so that when the condition is fulfilled, a second gateway support node is determined to be more suitable for transmitting packets than the first gateway node selected for transmitting packets, and

instructing to select, instead of the first gateway node, the second gateway support node by sending a first message indicating the second gateway support node.